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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Paper No. 16

Application Number: 09/292,096  
Filing Date: April 14, 1999  
Appellant(s): GARIBALDI ET AL.

Bryan K. Wheelock  
For Appellant

**EXAMINER'S ANSWER**

**MAILED**

**OCT 08 2002**

**GROUP 370**

This is in response to the appeal brief filed August 5, 2002.

**(1) *Real Party in Interest***

A statement identifying the real party in interest is contained in the brief.

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**(2) *Related Appeals and Interferences***

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

**(3) *Status of Claims***

The statement of the status of the claims contained in the brief is substantially correct with respect to the claims that are on appeal. It is noted that it is claims 18-39 that have been withdrawn from consideration. This appears to merely be a typo on Appellant's part.

**(4) *Status of Amendments After Final***

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

No amendment after final has been filed.

**(5) *Summary of Invention***

The summary of invention contained in the brief is correct.

**(6) *Issues***

The appellant's statement of the issues in the brief is correct.

**(7) *Grouping of Claims***

Appellant's brief includes a statement that claims 2, 3, 4, 5, 6, 7, 8, 9, 15, 16 and 17 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

**(8) *Claims Appealed***

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(9) *Prior Art of Record***

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5,681,260	UEDA et al.	10-1997
5,060,632	HIBINO et al.	10-1991
5,899,851	KONINCKX	5,1999

**(10) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

1. Claims 2, 4, 7, 9 and 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. As to these claims, the term "display" lacks antecedent basis (the term "display component" was previously recited).
2. Claims 2-4, 6, 7, 9 and 11-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Ueda et al. (U.S. Pat. 5,681,260) as set forth in numbered paragraph 6 of the first Office Action on the merits, paper number 9. This explanation was supplemented in numbered paragraph 7 of a subsequent Office Action (Final). So as not to refer to two separate Office Actions, the above mentioned explanation is repeated below.

With respect to claim 2, Applicant argues that the controller of Ueda et al. does not "apply a magnetic field of a specific direction to change the orientation of the magnetic body and thus the orientation of the distal end of the endoscope". The Examiner maintains his position that this is exactly what the controller of Ueda et al. does. In fact, this is the whole purpose of conventional magnetic guiding apparatus--to change the orientation of the distal end of an instrument by applying a directional magnetic field. As an illustrative example, note Figure 12 of Ueda et al. The fact that Ueda et al. might "pull" a magnet in a particular direction in certain instances does not differentiate over the above mentioned limitation but actually supports it.

With respect to claims 4, 15, 16 and 17, Applicant states that Ueda et al. "relies upon a magnetic gradient or pulling force to pull a magnet in a particular direction" and does not teach "an aligning field to

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align the distal end of an endoscope in a particular direction". The Examiner does not see the difference. Again, note Figure 12 of Ueda et al. which shows an "aligning" field which "aligns" the distal end of the endoscope in a particular direction.

3. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ueda et al. in view of Hibino et al. (U.S. Pat. 5,060,632) for the reasons set forth in numbered paragraph 8 of the first Office Action on the merits, paper number 9.

4. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ueda et al. in view of Koninckx (U.S. Pat. 5,899,851) for the reasons set forth in numbered paragraph 9 of the first Office Action on the merits, paper number 9.

It is noted that claim 8 does not appear in the rejection under 35 U.S.C. 102. After reconsideration in view of Appellant's arguments, the Examiner has withdrawn his position that Ueda et al. anticipates this claim.

**(11) Response to Argument**

**35 U.S.C. 112**

With respect to this rejection, Appellant argues that reference to the "display" when a "display component" was previously recited is "a clear and unmistakable reference to the display on the display component". It wasn't to the Examiner. In fact, since there was no antecedent basis for the term "display", the Examiner thought "display component" was intended. That is the reason for the rejection. Whether or not a "display" is an element on the "display

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component” (note Appellant’s comment on page 6, last paragraph), specific reference to an allegedly inherent element of the display component still lacks antecedent basis unless expressly defined as an element of such component in the claim (excluding inherent parameters such as an outer surface). “The power source” would also lack antecedent basis even though the “display component” (e.g., monitor) inherently has one.

**35 U.S.C. 102**

Regarding Appellant’s arguments with respect to claims 2 and 4, Appellant submits that Ueda et al. “does not teach a controller that operates a magnet to apply an aligning field to align the distal end of an endoscope in a particular direction”. Since this language is not in the claim, the Examiner will not attempt to address it.

Claim 2 actually requires, *inter alia*, a “*controller controlling the magnetic field generating apparatus to apply a magnetic field of a specific direction to change the orientation of the magnetic body and thus the orientation of the distal end of the endoscope*”. Clearly and inarguably, the device of Ueda et al. changes the orientation of the magnetic body and thus the orientation of the distal end of the endoscope. Note Figures 4, 8B, 9B, 12, 15, etc. Also note col.12, lines 22-28 which describes the distal insertable part of the endoscope as being “bent in a desired direction”. Wouldn’t being “bent” inherently mean a change in orientation? The Examiner thinks so.

This change in orientation is done by a controller--Figure 1a shows a controlling apparatus (12) which is connected to the magnetic force generating apparatus (11). Figures 7,

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8A and 8B show another controller/generating apparatus according to the Ueda et al. invention.

It is thus quite clear that Ueda et al. does not lack a controller.

So it appears that the controversy is over what is applied by the controller. Again, referring to what is actually claimed, the claim calls for the magnetic field generating apparatus to apply a magnetic field of a specific direction. Essentially, any magnetic field will have a specific direction. Note: laws of physics. Thus, it all boils down to whether or not the magnetic field generating apparatus of Ueda et al. applies a magnetic field. Note col.16, lines 30-32 and col.26, lines 14-21 which expressly mention a magnetic field. Notwithstanding the fact that Ueda et al. expressly states that the disclosed device applies a magnetic field as pointed out immediately above, it must be pointed out that **you can not have a magnetic gradient without a magnetic field**. And Appellant was kind enough to point out how many times Ueda et al. references the magnetic gradient (page 7, first full paragraph).

Thus, it is the Examiners position that Ueda et al. expressly and clearly teaches the structure alleged to be missing in this reference, and namely the controller controlling the magnetic field generating apparatus to apply a magnetic field of a specific direction to change the orientation of the magnetic body and thus the orientation of the distal end of the endoscope.

It is noted that Appellant takes the position that "there is no way to control the magnetic field direction in any of the embodiments of Ueda et al." (page 7, last two lines). Claim 2 only requires a device which can apply a magnetic field in a specific direction. This encompasses at least one field, one direction. If, for arguments sake, the claim recited that a selective multi-directional magnetic field could be applied (which is what the Examiner believes Appellant intended to mean), this still would be anticipated by Ueda et al. The apparatus (11) in Figures

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3A and 3B show a two dimensional selective movement of the magnetic field. Figures 7, 8A and 8B show an embodiment where the magnetic field can be selectively applied in multiple directions to orient the endoscope in a three-dimensional space.

The above position is expected to extend to the corresponding and similar language of claims 15 through 17 just as Appellant's arguments did (see page 8, first full paragraph).

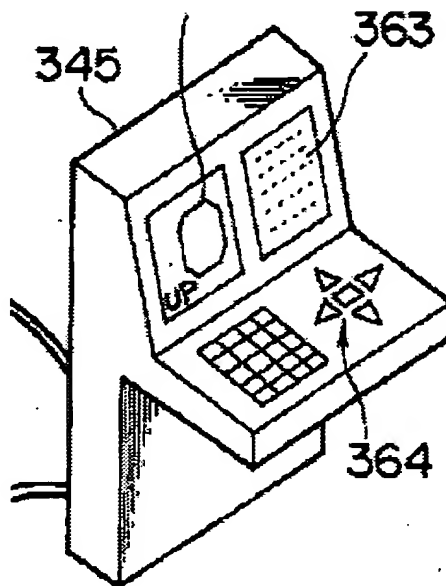
Regarding claims 3 and 4, Appellant argues that "Ueda et al. does not teach the use of magnetic field alone or in combination with the magnetic gradient to control an endoscope". Again, **you can not have a magnetic gradient without a magnetic field**. Application of a magnetic gradient by Ueda et al. inherently requires the application of a magnetic field. All the time. Furthermore, a magnetic field, generated electrically or by permanent magnets, as is done by Ueda et al. will inherently create a magnetic gradient. Both are applied to orient and move the endoscope. This is why the Examiner never questioned the adequacy of Appellant's specification, *which never mentions a magnetic gradient*. It was assumed by the Examiner to be a permanent inherent parameter, a by-product of the generation of the magnetic field. However, if Appellant wants to raise the issue of separate magnetic field and gradient application and control, then the Examiner will want to raise the issue of a non-enabling disclosure.

Regarding claim 6, Ueda et al. discloses a joystick (50, Fig.6) for moving the magnetic force generating part (col.10, lines 29-34). A joystick is "operable in at least two mutually perpendicular directions". The joystick causes the magnetic force generating part (31) to change the magnetic field (as discussed above) "to move the distal end of the endoscope in two mutually

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perpendicular directions" (note Figures 3A, 3B, and 4 and particularly the X and Y arrows of Figure 3B). It doesn't get any simpler than that.

Regarding claims 7 and 8 (which appear to be argued together), Appellant argues that "Ueda et al. lacks any indicia, let alone indicia required by claim 8". Lacks any indicia? Referring to the Examiners rejection, "As to claims 7 and 8, note Figure 46 and col.26, lines 47-51". Figure 46 shows this:



Note the "UP" indicia. Column 26, lines 47-51 states: "Also, in the endoscope image monitor 48, the direction of the magnetic force generated by the magnetic force generating apparatus 361 is displayed. For example, if the direction of the magnetic force is upward, as shown in FIG. 46, a message of "UP" will be displayed". Clearly, Ueda et al. does NOT lack indicia.

Regarding claim 9, and as explained in the Examiner's rejection that is being relied upon, in the case that the vertical direction of the obtained image corresponds to the vertical with



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respect to gravity (meaning that the display is showing a true upright image with respect to gravitational vertical, which is usually the desired case), then the vertical and horizontal movements of the endoscope will correspond to the vertical and horizontal movements of the display image. This is the typical situation when imaging with an endoscope, unless the surgeon does not want to view a true vertical image and allows the endoscope to rotate. In any event, the device of Ueda et al. is certainly capable of meeting this limitation during use.

Regarding claims 15 and 17, the display is defined as having vertical and horizontal directions. All this claim requires, with respect to what Appellant believes is missing in Ueda et al., is that the distal end of the endoscope be capable of moving in the vertical and horizontal directions. Although Ueda et al. only exemplifies the "UP" (vertical) direction in col.26, lines 47-51, it is inherent in the disclosure of Ueda et al. that the distal end of the endoscope moves left and right (horizontal) and all combinations there between (note the device as shown in Figure 47A and 47B, which is associated with the embodiment of Figure 46).

Regarding the argument for claim 16, Ueda et al., as previously cited, provides a upward force to move the distal end of the endoscope upward while indicating the upward direction on the display. Thus, Ueda et al. teaches the change in orientation of the distal end of the endoscope in a first plane (upward movement) corresponding to a first direction (UP) relative to the orientation indicia on the display (UP, Fig.46) (note lines 8-9 of the claim). As noted above, a horizontal (left/right) movement and indicia is clearly inherent.

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*35 U.S.C. 103*

Regarding the arguments concerning claim 5, the rejection speaks for itself with respect to what the references teach, and the motivation for making the obvious modification.

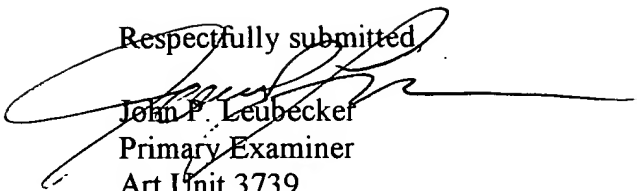
Regarding the arguments concerning claim 10, the rejection speaks for itself with respect to what the references teach, and the motivation for making the obvious modification.

Appellant does not rebut the position of obviousness to make such a modification but instead argues that the features of the claims are not shown by the Ueda et al. and the Konickx references. However, as pointed out in the rejection, all features are present.

For the above reasons, it is believed that the rejections should be sustained.

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Respectfully submitted,

  
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